Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

The effect of eight weeks dynamic neuromuscular stabilization program on spine alignment, functional movements, balance and general health in middle age inactive homemakers: clinical randomized trial

Protocol summary

Study aim

Eight weeks dynamic neuromuscular stabilization program have an effect on spine alignment, functional movements, balance and general health in middle age inactive homemakers.

Design

A clinical trial with a control group, with parallel groups, randomized, 40 healthy people. Lottery was used for randomization.

Settings and conduct

Researcher's personal location, height and weight measurement, age registration. General-health-questionnaire-GHQ-28, Y-balance test,FMS will be measured.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 40 and 55 years old.Housekeeping experience of at least 5 years.At least 1 delivery and at most 3.A resident of Tehran, not having a job outside the home, Absence of pregnancy during the research period. In case of non-specific chronic pain, having a maximum score of 4 from the WES criteria Questionnaire of readiness for physical activity (being in an favorable situation), No records of orthopedic diseases in the last 7 years, diabetes, Parkinson's, cancer, disability. Exit criteria:Absence of a person to continue, absence of more than 3 sessions, non-attendance at the post-exam, inability to perform exercises and tests.

Intervention groups

the subjects of the experimental group will perform dynamic neuromuscular stability exercises. In this way, their exercises will be done three times a week, each session will be about 60 minutes and for eight weeks. The subjects of the control group did not have any intervention at the same time and lead their normal lives

Main outcome variables

Lordosis and kyphosis angle, balance, functional movement, general health of middle-aged housewives

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20240103060606N1**
Registration date: **2024-03-08, 1402/12/18**
Registration timing: **prospective**

Last update: **2024-03-08, 1402/12/18**
Update count: **0**

Registration date

2024-03-08, 1402/12/18

Registrant information

Name

Marzieh Horri Farahani

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 7775 3453

Email address

m.horrifarahani@mail.sbu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-04-08, 1403/01/20

Expected recruitment end date

2024-04-17, 1403/01/29

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
The effect of eight weeks dynamic neuromuscular stabilization program on spine alignment, functional movements, balance and general health in middle age inactive homemakers: clinical randomized trial

Public title
The effect of dynamic neuromuscular stabilization program on spine alignment, functional movements, balance and general health in middle age inactive homemakers: clinical randomized trial

Purpose
Supportive

Inclusion/Exclusion criteria

Inclusion criteria:
The subject's age is between 40 and 55 years old Housekeeping experience of at least 5 years At least 1 delivery and at most 3 A resident of Tehran In case of non-specific chronic pain, having a maximum score of 4 from the VAS criteria Physical activity readiness questionnaire(being in a favorable situation)

Exclusion criteria:
pregnancy during the research period having a job outside the home Diabetes cancer Parkinson's vision problems

Age
From **40 years** old to **55 years** old

Gender
Female

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **40**

Randomization (investigator's opinion)
Randomized

Randomization description
Targeted and accessible sampling based on the entry criteria and placement in two intervention and control groups randomly using lottery

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics working group in the research of Sports Sciences Research Institute

Street address
no 3, fifth alley, Mir Emad St, Ostad Motahari St.

City
Tehran

Province
Tehran

Postal code
1587958711

Approval date
2023-11-14, 1402/08/23

Ethics committee reference number
SSRI.REC-2307-2347 (R1)

Health conditions studied

1

Description of health condition studied
They are not sick

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
kyphosis angle

Timepoint
before the start of the intervention and 8 weeks after the start of the exercises

Method of measurement
60 cm flexible ruler for kyphosis angle made in Iran

2

Description
lordosis angle

Timepoint
before the start of the intervention and 8 weeks after the start of the exercises

Method of measurement
60 cm flexible ruler for kyphosis angle made in Iran

3

Description
functional movement screen score

Timepoint
the intervention and 8 weeks after the start of the exercises

Method of measurement
functional movement screen kit

4

Description
general health

Timepoint
the intervention and 8 weeks after the start of the exercises

Method of measurement

The General Health Questionnaire-28

5

Description
dynamic balance
Timepoint
before the start of the intervention and 8 weeks after the start of the exercises
Method of measurement
Y balance test kit

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Performing dynamic neuromuscular stability exercises, for 8 weeks, 3 sessions per week, training duration 1 hour, ten minutes warm-up, 10 minutes cool-down, 40 minutes main exercises.Dynamic neuromuscular stabilization is an evolving concept in the field of rehabilitation. It works on the entire stabilizing system of the spine along with optimal activation of the diaphragm enabling the appropriate movement of the extremities.
Category
Rehabilitation

2

Description
Control group: Eight weeks of normal life without any intervention or training
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Tehran, Pirizi district, Aqdasiye district
Full name of responsible person
Marzieh Horri Frahani
Street address
No 13, 2/34 Alley,2nd Niro havaei Street
City
Tehran
Province
Tehran
Postal code
1737633847
Phone
+98 21 7775 3453
Email
m.horrifarahani@mail.sbu.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Faculty of Sports Sciences and Health of Shahid Beheshti University
Full name of responsible person
Mehdi Gheitasi
Street address
Shahid Beheshti University, Shahid Shahriari Square, Evin, Tehran, Iran
City
Tehran
Province
Tehran
Postal code
1983969411
Phone
+98 21 2990 2761
Email
int-re@sbu.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Faculty of Sports Sciences and Health of Shahid Beheshti University
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Faculty of Sports Sciences and Health of Shahid Beheshti University
Full name of responsible person
Marzieh Horri Farahani
Position
Master student
Latest degree
Bachelor
Other areas of specialty/work
Sports injury and corrective exercises
Street address
no 3,Mahmoudi's dead,Javad Sad Alley,West Soleimani St,Andrezgo St.
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1934964759
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m.horrifarahani@mail.sbu.ac.ir

Person responsible for scientific inquiries

Contact
Name of organization / entity
Faculty of Sports Sciences and Health of Shahid Beheshti University
Full name of responsible person
Marzieh Horri Farahani
Position
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Person responsible for updating data

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Full name of responsible person
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Master Student
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m.horrifarahani@mail.sbu.ac.ir

Sharing plan

Deidentified Individual Participant Data Set (IPD)
Yes - There is a plan to make this available
Study Protocol
Undecided - It is not yet known if there will be a plan to make this available
Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available
Analytic Code
Undecided - It is not yet known if there will be a plan to make this available
Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available
Title and more details about the data/document
All data is potentially shareable after de-identifying individuals
When the data will become available and for how long
The access period starts 6 months after the results are published
To whom data/document is available
All interested people
Under which criteria data/document could be used
All interested people
From where data/document is obtainable
Email address and research gate social pages of researcher: marzieh.horrifarahani@gmail.com m.horrifarahani@mail.sbu.ac.ir https://www.researchgate.net/profile/Marzieh-H-Farahani
What processes are involved for a request to access data/document
Within 2-3 days after request marzieh.horrifarahani@gmail.com m.horrifarahani@mail.sbu.ac.ir https://www.researchgate.net/profile/Marzieh-H-Farahani
Comments